

REMARKS

Status Summary

In this Amendment, no claims are cancelled, and claims 34-46 are added. Therefore, upon entry of this Amendment, claims 1-46 will be pending.

Claim Rejections 35 U.S.C. § 103(a)

Claims 1-3, 7-9, 16, 22, 25, 27, 28, 30, and 32 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,515,985 to Shmulevich et al. (hereinafter, "Shmulevich") in view of U.S. Patent No. 6,178,181 to Glitho (hereinafter, "Glitho"). This rejection is respectfully traversed.

The present invention, for example as claimed in independent claims 1, 25, and 30, includes methods and systems for providing a distributed call signaling message routing gateway where geographically distributed routing elements associated with different SS7 signaling points share an SS7 point code and form a geographically distributed STP. For example, independent claims 1, 25, and 30 have been amended to recite that the first and second distributed gateway routing elements are located remotely from each other and share an SS7 point code, thereby function as a geographically distributed STP associated with different SS7 signaling points. Providing a geographically distributed STP where routing elements share a common point code allows distributed gateway routing elements to replace a centralized STP and reduces the likelihood of a complete network outage caused by failure of a single node. In addition, because the distributed gateway routing elements share a point code, there is no need to reconfigure the signaling points with which the distributed gateway routing

elements communicate. Finally, in light of the scarcity of SS7 point codes, sharing point codes provides an additional advantage of reducing the number of point codes consumed by a network operator.

The portion of Shmulevich that relates to sharing SS7 point codes and providing a distributed gateway is not prior art to the present application because it has a later U.S. filing date than the present application. In column 10 beginning at line 2, Shmulevich states:

Preferably, control units **120a** and **120b** on both sides of the network, as well as the control units of other gateways in the SS7 over packet system, have the same SS7 point code, so that they appear to the MSCs as though they constitute a single, distributed STP. Most preferably, in the redundant configuration of Figure 6, control units **122a** and **122b** likewise share a common point code (different from that of units **120a** and **120b**), so that there are in fact two such distributed STPs available to the MSCs. (See column 10, lines 2-11 of Shmulevich.)

This passage is the only part of Shmulevich that mentions sharing SS7 point codes or providing a geographically distributed STP. The original priority application that lead to Shmulevich, U.S. provisional application no. 60/181,097, does not contain this passage or any information that would teach or suggest providing a geographically distributed STP where distributed gateway routing elements share a common point code. The Shmulevich priority application, a copy of which is attached hereto, contains engineering and marketing documents regarding the ASG1000 Product available from Airslide Systems. Nothing in the Shmulevich priority application teaches or suggests providing a geographically distributed STP where distributed gateway routing elements associated with different SS7 signaling points share a common point code and function as a

geographically distributed STP. Thus, the effective filing date of the above referenced quotation from Shmulevich is the filing date of the regular U.S. application (application no. 09/777,799) or February 6, 2001. Because Applicants' U.S. patent application no. 09/768,881 was filed January 24, 2001, the portion of Shmulevich quoted above is not prior art under 35 U.S.C. § 102(e) to the claims of the present application.

In addition, Applicants note that because the inventors in Shmulevich are Israeli residents, the information contained in the documents in U.S. provisional application no 60/181,097 is not prior art to the claims of the present application under 35 U.S.C. § 102(a). Accordingly, because the portion of Shmulevich referenced above fails to qualify as prior art under 35 U.S.C § 102, it cannot be cited as prior art against the claims of the present application under 35 U.S.C. § 103. Thus, because the above-referenced portion of Shmulevich fails to qualify as prior art against the claims of the present application, Applicants respectfully submit that the rejection of the claims based on Shmulevich in view of Glitho should be withdrawn for this reason alone.

Moreover, Glitho fails to teach the portions of the claimed invention missing from Shmulevich. Glitho is directed to a mapping function for sending data between a primary HLR and a backup HLR. For example, in column 1 beginning at line 29, Glitho states:

Therefore, an alternate way to transfer data from the backup HLR to the primary HLR is needed. (See column 1, lines 29-31 of Glitho.)

There is absolutely no teaching or suggestion in Glitho of providing distributed gateway routing elements associated with different SS7 signaling points that share a point code

and that function as a geographically distributed STP. Accordingly, the combination of Shmulevich and Glitho fail to teach or suggest the invention as claimed. Accordingly, Applicants respectfully submit that the rejection of claims 1-3, 7-9, 16, 22, 25, 27-28, 30, and 32 as unpatentable over Shmulevich in view of Glitho should be withdrawn.

Claims 4-6, 10-15, 17-21, 23, 26, 29, 31, and 33 were rejected under 35 U.S.C. § 103(a) as unpatentable over Shmulevich and Glitho in view of European Patent Publication No. EP 1,054,568 to Krishnamurthy (hereinafter, "Krishnamurthy"). This rejection is respectfully traversed.

As stated above with regard to the rejection of the independent claims, Shmulevich fails to qualify as prior art and the combination of Glitho and Shmulevich fails to render the invention claimed in the independent claims of the subject application obvious. Krishnamurthy fails to teach or suggest the portions of the claimed invention missing from Shmulevich and Glitho. For example, Krishnamurthy fails to teach or suggest distributed gateway routing elements associated with different SS7 signaling points that share an SS7 point code and function collectively as a distributed STP. Krishnamurthy is directed to an SCCP-IP gateway that sends SCCP messages over an underlying IP network. There is no teaching or suggestion in Krishnamurthy that different SCCP/IP gateways function collectively as a distributed STP or share an SS7 point code. Thus, for this reason alone, the rejection of claims 4-6, 10-15, 17-21, 23, 26, 29, 31, and 33 should now be withdrawn.

Moreover, on page 6 of the Official Action, the following is stated:

Regarding claims 31 and 33, Shmulevich and Glitho fails to disclose IPV6 and MPLS protocol for encapsulating the signaling message for

transmitting via Internet. However, the Examiner takes official notice that IPV6 and MPLS are well known and expected in the art if they time the invention to apply these protocols to Shmulevich and Glitho. The motivation would have been a high reliability way to transmit the SS7 message via the data network. (See page 6 of Official Action mailed May 9, 2003.)

Applicants respectfully submit that the Official Action fails to establish a prima facie case of obviousness. The Patent and Trademark Office has the burden under § 103 to establish a prima facie case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge available to one of skill in the art would lead that individual to combine the relevant teachings of the references. (See In re Fine, 837 F.2d 1071 (Fed. Cir. 1988).) Nothing in any of the cited references teaches using IPv6 or MPLS to transmit SS7 messages over a virtual bus with a desired quality of service. Shmulevich discloses a quality of service manager **178** in Figure 8 but does not teach or even remotely suggest any specific quality of service methods, such as IPv6- or MPLS-related methods. Glitho teaches in Figure 4 using IP version 4 time to live and type of service parameters to provide low delay and high reliability transport. Nothing in Glitho teaches or suggests IPv6 or MPLS methods. Krishnamurthy does not teach any quality of service methods. Thus, Applicants respectfully submit that there is nothing in the prior art cited in the official action that teaches or suggests the IPv6 or MPLS methods in the dependent claims of the present application. Because the examiner has failed to provide any teaching or suggestion in the prior art of the invention claimed in dependent claims 31 and 33, Applicants respectfully submit that this rejection is based on hindsight stemming from Applicants

disclosure, rather than the prior art. Thus, for this additional reason, the rejection of these claims should be withdrawn.

New Claims

New dependent claims 34-46 are added. Support for the new claims is found, for example, on page 10, line 23 - page 15, line 24 of the present application.

CONCLUSION

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

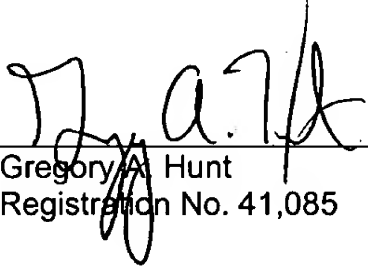
The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

Date: October 9, 2003

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Enclosure